# PRODUCT BACKLOG

USER STORIES	ACCEPTANCE CRITERIA
<ul> <li>1. Secure Login and Authentication</li> <li>As a Parking Lot User,</li> <li>I want to log in securely using my credentials,</li> <li>so that my parking sessions and payment information are protected.</li> <li>Priority: High</li> </ul>	<ul> <li>Users should be able to log in using secure methods, including passwords, OTP verification, or biometric authentication.</li> <li>The system should validate credentials and prevent unauthorized access attempts.</li> <li>In case of failed login attempts, users should be notified, and account recovery options should be provided.</li> </ul>
<ul> <li>2. Reserve/Book a Slot</li> <li>As a Parking Lot User,</li> <li>I want to reserve or book a parking slot,</li> <li>so that I can ensure that I have a parking space when I arrive.</li> <li>Priority: High</li> </ul>	<ul> <li>The system must display whether slots are available or not.</li> <li>The system should generate a booking reference number.</li> <li>The user receives a confirmation via email/SMS with the booking details.</li> </ul>
<ul> <li>As a Parking Lot User,</li> <li>I want to receive a parking slot entry reminder,</li> <li>so that I am reminded to use the reserved slot before the time expires.</li> </ul>	<ul> <li>The system should automatically send a reminder to the user before the reserved time starts.</li> <li>The reminder should include details such as the parking slot number and reservation time.</li> </ul>

<ul> <li>The reminder should be sent via the user's preferred communication method (email/SMS).</li> </ul>
<ul> <li>The system should validate the user's reservation upon entry.</li> <li>The user should be able to enter the parking lot by using an entry token.</li> <li>The system should log the entry and exit times.</li> <li>The user should be notified of successful entry and exit.</li> </ul>
<ul> <li>The user should be able to extend the parking time through the system before the current time expires.</li> <li>The system should check the availability of the slot for the extended time.</li> <li>The user must receive confirmation of the extension along with the updated total charge.</li> </ul>
<ul> <li>The user should be able to leave the parking spot or end the parking session earlier than planned.</li> <li>The system should allow early checkout without adjusting the payment.</li> <li>The user should receive a confirmation of the early checkout.</li> </ul>

#### 7. Payment

- As a Parking Lot User,
- I want to make a payment easily through the system,
- so that I can complete my parking reservation or exit without issues.

Priority: **Medium** 

- The payment process should be smooth and secure.
- The system should support payment methods.
- The user should receive a receipt immediately after payment.
- The payment should be linked to the user's account and reservation details.

#### 8. Transaction Failure Handling

- As a Parking Lot User,
- I want to be notified of any transaction failures,
- so that I can take corrective action to ensure payment goes through.

Priority: **Medium** 

- The system should detect transaction failures and notify the user immediately.
- The notification should include details about the failure and possible steps to retry the transaction.
- The user should be able to retry the payment process without losing the reservation or current session.

### 9. Accessible Parking for Disabled Users

- As a disabled Parking Lot User,
- I want to access dedicated parking spots and assistance options,
- so that I can park easily without facing any accessibility issues.

Priority: **Medium** 

- The system should provide dedicated parking slots for disabled users, marked clearly and accessible easily.
- Disabled users should have the option to request assistance during entrance or exit.
- The system should ensure that these spots are reserved only for disabled users with proper identification.

#### 10. Manage Employee Information

- As a Parking Lot Owner,
- I want to manage employee information,
- so that I can keep track of the staff responsible for managing the parking lot.

Priority: **Medium** 

- The system should allow the owner to add, edit, and remove employee information.
- The system should store information such as employee name, role, contact details, and shifts.
- The owner should be able to assign roles and responsibilities to employees.
- The system should generate an employee report that can be viewed or exported.

#### 11. View Dashboard

- As a Parking Lot Owner,
- I want to view the dashboard,
- so that I can monitor parking lot usage, revenue, and other relevant data.

Priority: **High** 

- The dashboard should display real-time data including the number of slots occupied, revenue generated, and upcoming reservations.
- The dashboard should be accessible via both desktop and mobile devices.
- The owner should be able to export the dashboard data into a report format.

#### 12. See Total Revenue

- As a Parking Lot Owner,
- I want to see the total revenue generated by the parking lot,
- so that I can assess the financial performance of the parking facility.

Priority: Low

- The system should display total revenue generated over a selected period.
- The owner should be able to break down revenue by day, week, month, or custom date range.
- The revenue report should include details such as payment methods used and average revenue per slot.

	The owner should be able to generate and download the revenue report.
<ul> <li>13. Change Parking Rates</li> <li>As a Parking Lot Owner,</li> <li>I want to change parking rates,</li> <li>so that I can adjust pricing according to demand or special events.</li> <li>Priority: Medium</li> </ul>	<ul> <li>The system should allow the owner to change parking rates for different time periods, days, or specific events.</li> <li>The owner should be able to preview the impact of the rate change on revenue before applying it.</li> <li>The system should notify users of any rate changes in advance.</li> </ul>
<ul> <li>14. Verify User Actions and Monitor Parking Operations</li> <li>As Security Personnel,</li> <li>I want to verify user actions through OTP verification and monitor parking operations,</li> <li>so that I can ensure secure and authorized access to the parking lot.</li> <li>Priority: High</li> </ul>	<ul> <li>Security Personnel should be able to view and monitor parking operations, including user entries and exits.</li> <li>They should verify user actions, such as booking, entrance, or exit, through OTP verification to ensure security.</li> <li>Security Personnel should have access to shared reports/logs for tracking activities and resolving issues.</li> <li>Alerts should be provided for any discrepancies or unauthorized actions to take appropriate measures.</li> </ul>

## 15. Assist with Transaction Failure Handling

- As Security Personnel,
- I want to assist in handling transaction failures,
- so that I can help users resolve payment issues quickly.

Priority : **Medium** 

- Security Personnel should be notified of transaction failures or issues with payments.
- They should have access to basic troubleshooting steps or be able to guide users to complete the transaction.
- Security Personnel should have a protocol for dealing with unresolved payment issues, including escalation or temporary permissions.